Amendments to the Abstract:

Please replace the previous Abstract with the following redlined Abstract:

DMOS TRANSISTORS WITH SCHOTTKY DIODE BODY STRUCTURE

ABSTRACT OF THE DISCLOSURE

A method of operating a vertical DMOS device in a complex integrated circuit having a well region defined by a buried isolation region and an overlapping deep transistor drain region within an epitaxial layer formed over a substrate, a body region having two source regions within the well region, insulated gates over the two source regions, and associated with a Schottky diode, the method including contact over a central portion of the well region and spaced from the body region. The Schottky contact defines a Schottky diode within the epitaxial layer for diverting current from flowing through a body-to-drain pn junction diode to flowing through the Schottky diode when a metallic source contact becomes more positive than a drain of the DMOS transistor by forward conduction voltage of the Schottky diode to reduce the amount of source current reaching the substrate and reducing operational characteristics of parasitic devices associated with the substrate in the event of a below ground effect or an oversupply effect. The invention reduces or eliminates altogether the effects of parasitic transistors in the complex integrated circuit.